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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

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OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

Dockets Facility U.S. Department of Transportation Room #PL-401 400 Seventh Street, S.W. Washington, D.C. 20590-0001

Re.:

Proposed Rule; Vessel and Facility Response Plans for Oil: 2003 Removal Equipment Requirements and Alternative Technology Revisions, 67 FR 63331, October 11, 2002.

Docket USCG-2001-8661 — 25 Agency Contact: Robert Pond; Telephone (202)267-6603

Dear Sir or Madam:

The Environmental Protection Agency's (EPA's) Office of Emergency and Remedial Response appreciates the opportunity to submit comments on the above-referenced Notice of Proposed Rulemaking regarding 2003 Removal Equipment Requirements. The Environmental Protection Agency (EPA) supports the Coast Guard's efforts to review response plan removal equipment requirements and to ensure that environmental issues are adequately considered by preparing a Programmatic Environmental Impact Statement (PEIS). The Agency is eager to participate in the PEIS process and looks forward to providing comments about the PEIS at an early stage.

Requirements for response resources, particularly mechanical recovery, directly impact the ability of EPA and facility owners and operators to prepare and respond effectively to spills in areas under EPA jurisdiction. EPA is the lead agency for response to oil spills in the inland zone and has worked closely with Coast Guard for many years to insure consistency in the agencies' regulatory program requirements. In addition to maintaining the National Contingency Plan Product Schedule (at subpart J of 40 CFR part 300, National Oil and Hazardous Substances Pollution Contingency Plan or NCP), EPA chairs Area Committees that develop preauthorization plans and plays a special role on Regional Response Teams (RRTs) that approve or disapprove these plans.

Under the Oil Pollution Act (OPA 90, Public Law 101-380) and Executive Order 12777, owners and operators of vessels and facilities must prepare and submit oil discharge response plans. The Coast Guard regulates tank vessels and marine transportation-related facilities, while EPA regulates non-transportation-related facilities. EPA's Facility Response Plan regulation applies to the owners or operators of approximately 6,000 facilities, including some marine facilities and complexes regulated by EPA and Coast Guard.

In Appendix E of 40 CFR part 112, EPA has established requirements to determine for planning purposes the quantity of resources and response times necessary to respond to the maximum extent practicable to a worst-case discharge, and to other discharges, as appropriate. The requirements were adapted from similar requirements developed by the Coast Guard for vessel response plans and marine transportation-related facility response plans. Like Appendix C of 33 CFR part 154, EPA's Appendix E contains operability criteria for oil discharge response resources and caps on response resources that facility owners or operators must identify and ensure the availability of, through contract or other approved means. This close relationship between EPA and Coast Guard regulations is especially important in the case of complexes, which are facilities with a combination of transportation-related and non-transportation-related components, such as a marine transfer facility (under Coast Guard jurisdiction) with aboveground storage tanks (under EPA jurisdiction).

We are concerned that the Coast Guard rulemaking will affect EPA and EPA-regulated facilities, even though much of the rationale for the proposed revisions is focused on discharges in the open ocean. For example, the preamble to the proposed rule states that the Coast Guard agrees with the 1989 National Academy of Sciences report on dispersants, which concludes that, "Sensitive inshore habitats, such as salt marshes, coral reefs, sea grasses and mangroves, are best protected by preventing oil from reaching them. Dispersion of oil at sea, before a slick reaches a sensitive habitat, generally will reduce overall and particularly chronic impact of oil on many habitats." 67 FR 63331, 63332 (October 11, 2002). This rationale is less relevant for discharges from inland facilities.

In the following sections, we describe our comments on specific provisions in the proposed rule.

Major Concerns

EPA has identified the following two major concerns with approaches discussed in the proposed rule:

1. We are pleased that the Coast Guard is considering replacing the 1993 credit given for dispersants in place of mechanical recovery capabilities. We are concerned, however, that the

proposed credit for *in situ* burning could greatly hamper our efforts to prepare and respond effectively to oil spills in certain areas. In some areas, particularly freshwater areas such as rivers and canals and the Great Lakes, the availability of response resources is barely satisfactory now. Any reduction of response resources, particularly mechanical recovery, would compromise the ability of EPA, state and local responders, and facility owners/operators to respond effectively to oil spills. We are especially concerned that the credit offered for *in situ* burning to offset the requirements for mechanical recovery could reduce the already limited supply of response resources even further in certain areas. We recommend that the Coast Guard remove the credit for *in situ* burning in Alternatives 3, 4, and 5 in areas where the credit may lead to resource shortages. If this credit remains, we would recommend an increase in mechanical recovery to offset any reduction in response resources produced by the credit.

2. We are greatly concerned about possible adverse environmental effects and effects on drinking water that may result from some alternatives in the proposed rule. Although the preamble stresses that the Coast Guard is preparing a Programmatic Environmental Impact Statement (PEIS) to insure that a broad range of environmental issues are considered adequately in the rulemaking, the PEIS is not yet available for public review.

Without the PEIS, we are unable to comment on whether potential adverse effects of each alternative have been fully accounted for in the support document "Regulatory Assessment for Changes to Vessel and Facility Response Plans: 2003 Response Requirements for Mechanical Recovery, Dispersants, *In Situ* Burning, and Aerial Tracking," USCG-2001-8661-2, February, 2002. Such omissions would be especially troublesome, because the analysis in the Regulatory Assessment forms the basis for statements in the preamble of the proposed rule about costs and benefits of the various alternatives.

We urge the Coast Guard to extend the comment period for this rulemaking until the Programmatic Environmental Impact Statement (PEIS) process has been completed, including external review and consideration of comments. The comments that we are submitting today may be modified or expanded after we have had the opportunity to review the PEIS.

On-Water Mechanical Recovery

The Coast Guard is not proposing an increase in the mechanical response equipment levels, in part because of "current technological limitations in the ability to contain oil for recovery in an open water environment." <u>Id.</u> at 63335. EPA-regulated facilities, however, are likely to discharge into inland rivers or ports, and as we discuss below, the dispersant and *in situ* burning provisions may be less appropriate for such facilities. The proposed rule preamble itself notes that, "Current dispersant and *in situ* burning pre-authorization/expedited approval zones around the country generally extend seaward from .5 to 3 miles offshore in coastal waters. There are no pre-authorizations/pre-approvals in estuarine or fresh water areas at this time" <u>Id.</u> at 63332. The Coast Guard's 1993 Response Plan Equipment Caps Review suggested establishing different requirements for fast-water recovery systems, but requirements for fast-water (e.g.,

greater than one knot), which would affect rivers and streams, have not been implemented.

We recommend that the Coast Guard consider increasing the mechanical recovery caps for response plans in certain environments, such as the Inland/Great Lakes area, if the in-situ burning proposal is finalized and results in a decrease in mechanical recovery resources in those environments.

Dispersants

The Coast Guard's proposed rule would require planholders to have pre-spill planning arrangements to use dispersants. If planholders handle certain types of oil and they are in areas where a dispersant pre-approval or expedited approval agreement exists, they must maintain dispersant stockpiles.

The proposed rule preamble contains several statements supporting these regulatory changes, and EPA is interested in the basis of the statements. Specifically, in response to commenters who believed that the effectiveness and effects of dispersants and in-situ burning have not been proven, the Coast Guard stated that the technologies "have been sufficiently documented," and that the technologies would in certain circumstances "produce net environmental benefits compared to reliance on mechanical methods alone." The Coast Guard states that, "Dispersants have been used effectively in numerous oil spill responses . . . in the U.S. . . ." <u>Id.</u> at 63332. The Coast Guard also agrees with respondents who "were in favor of the use of dispersants as a primary oil spill response tool." <u>Id.</u> at 63332.

We believe that the Coast Guard's rationale can be strengthened if the final rule preamble includes citations and data supporting these conclusions. The proposed rule does not address the decision criteria that would have to be followed to determine that a net environmental benefit would exist in any specific case. We are unclear how environmental benefits can be determined accurately without completion of the PEIS.

In response to commenters who said that the ability to track oil has improved, the Coast Guard expressed the belief that the tracking technologies need further development and are not practicable at this time, but did not provide further explanation for that belief. <u>Id.</u> at 63334. We encourage the Coast Guard to continue further research into this area for future implementation.

As the preamble points out, RRTs will be making decisions about pre-approval or expedited approval of dispersant use. EPA recommends that the Coast Guard reiterate information to RRTs and other stakeholders about conditions unfavorable to dispersant use, in order to help guard against indiscriminate dispersant use. These conditions can include the material discharged, the weather conditions, the receiving waters, environmental risks, and other factors. The National Response Team's Information Sheet on the use of dispersants suggests that dispersants generally should not be used in large, freshwater bodies of water or in marine waters that are restricted in flow, are shallow, and contain a large population of organisms.

EPA is especially concerned that the proposed rule will result in requests for dispersant use in areas that are inappropriate, such as freshwater environments. We support the authority and ability of the RRT to make decisions about dispersant pre-approval and expedited approval, but we recommend that certain planholders, such as those that are likely to discharge oil only into freshwater, be exempted from the requirements for response resources capable of conducting dispersant operations.

As stated in the Coast Guard's 1993 Response Plan Equipment Caps Review, dispersants have not been generally accepted for use in freshwater for several reasons, including:

- Concerns about limited volume of the receiving water;
- Concerns that the current dispersant inventory is chemically designed for saltwater and therefore could result in poor dispersion properties in freshwater; and
- Concerns about dispersing oil into drinking water intakes.

There are no pre-authorized areas for dispersant use in rivers and canals in the U.S. and several states have rejected use of dispersants in rivers and canals. Unless the volume and flushing rate of freshwater systems is adequate, water column concentrations of dispersed oil may be unacceptably high. Therefore, according to the Review, the limited likelihood of use suggests that dispersant equipment should not be required for inland rivers and canals. If conditions change in the future such that dispersants become a desirable inland option and the marketplace does not fill the demand, then a regulatory change could be instituted.

The effectiveness of dispersant application depends on how fast the oil emulsifies and how quickly the viscosity increases. Despite the Coast Guard's stated intent to avoid regulations that are over-prescriptive, the inclusion of proposed starting times of 7 hours for dispersant operations will likely be viewed as a prescriptive starting time and may prevent earlier responses. <u>Id</u>. at §154.1045(i)(1) et seq.

For Table 154.0145(i), since the effectiveness of dispersants is based upon a "generally agreed upon estimate" of 1 gallon dispersant to 20 gallons of spilled oil, additional volumes of dispersants should be required for tiers 1, 2, and 3 as there needs to be a factor of safety to account for spray drift during application and other factors. The factors that make dispersant application more efficient, such as high wave energy, also cause more difficulty in application. Structuring the rule to specify a minimum dispersant spraying capacity over time (Id. at 63333) rather than the amount of oil dispersed is an implied acknowledgment that oil slick dispersal will not be in accordance with the 1:20 assumption.

In Situ Burning

The Coast Guard did not propose requirements for *in situ* burning (ISB), but planholders would receive credit for establishing and maintaining ISB equipment if they handle certain types of oil and they are in areas where an ISB pre-approval or expedited approval agreement exists.

This provision encourages the planholders to add ISB capability and provides incentive for RRTs to finalize policies for pre-authorization and expedited approval.

EPA is concerned that the proposal is too prescriptive about equipment and operation of the burn, and these provisions do not allow for improvements in technology or broadening of experience. For example, the proposed rule would require the use of fire boom, even though some experts have suggested that fire boom is not necessary and that a burn can be conducted using regular boom and expecting it to be consumed. Further research and experience may show that fire boom need not be required. In addition, the proposal for starting times of 12 hours for *in situ* burning operations will likely be viewed as a prescriptive starting time and may prevent earlier responses. <u>Id</u>. at §154.1045(i)(1) et seq.

In addition, we object to the proposal that 10,000 barrels of ISB capability can provide a reduction of 10,000 barrels of mechanical recovery capability. Because there are restrictions on where *in situ* burning would be usable, including location and ignitability concerns, there is not a one-to-one tradeoff between mechanical recovery and *in situ* burning. However, because no regulatory limit is proposed, in theory ISB could completely replace mechanical recovery in all areas, including rivers and canals. Where there are limits on the use of ISB (such as near populated areas), the net effect of the offset will be to lower the mechanical recovery cap. In some inland rivers and the Great Lakes, there may only be a minimum amount of equipment currently, and a reduction in required mechanical equipment could affect a facility's ability to respond to a discharge in a timely and appropriate fashion. This can have a severe effect on drinking water intakes and sensitive environments.

Unintended Consequences

We are uncomfortable with the linkage between RRT pre-approval or expedited approval and equipment requirements. The RRT normally grants such approvals to speed response time, but if the proposed ISB credit is finalized and planholders can reduce their mechanical recovery capability, the RRT also would have to consider the ultimate effect on equipment levels. Approval of ISB may lower mechanical equipment below reasonable levels, and the RRT will be reluctant to do this. If the mechanical recovery caps are not raised, the rule may actually discourage the use of ISB in inland rivers and the Great Lakes.

We also think the pre-approval linkage can spur inappropriate use of dispersants, and the dispersant equipment requirements should only apply to offshore and near-shore environments where conditions are appropriate. This would also help relieve pressure on RRTs in inland areas, which may be suddenly deluged with pre-approval requests. Should inland pre-approvals be established in the future (through pre-planning and ecological risk assessment), the available supply of dispersant equipment and aircraft would likely be sufficient without a further regulatory increase.

Bioremediation

The preamble states that no pre-approvals have been developed for bioremediation (<u>Id.</u> at 6334). We note that some RRTs have developed bioremediation spill response plans. In 1995, the Caribbean RRT (CRRT) reviewed and approved a Bioremediation Spill Response Plan, which is modeled after a plan in EPA's Region 4. The CRRT plan was developed by the Bioremediation Subcommittee of the CRRT Response Technology Committee, which is comprised of representatives from EPA, USCG, NOAA, DOI, the Virgin Islands Department of Planning and Natural Resources and Puerto Rico's Environmental Quality Board. The Subcommittee used the "Interim Guidelines for Preparing Bioremediation Spill Response Plans," prepared by the National Bioremediation Spill Response Subcommittee of EPA Headquarters' Bioremediation Action Committee.

EPA has issued "Guidelines for the Bioremediation of Marine Shorelines and Freshwater Wetlands," September, 2001. The document is available on the EPA Website. We are also reviewing "Guidelines for the Bioremediation of Oil-Contaminated Salt Marshes," which we expect to be available within the next several months.

<u>Importance of Prevention</u>

Like the Coast Guard, EPA agrees with the National Academy of Sciences that sensitive inshore habitats are best protected by preventing oil from reaching them. EPA believes that the strongest environmental protection is achieved by preventing spills of oil into the environment. Once oil is spilled in the environment, the opportunities for reducing environmental damage and other adverse effects are limited. 62 FR54530, October 20, 1997. EPA has long been concerned about the erroneous impression that there is no need to prevent oil spills if dispersants are applied. We encourage the Coast Guard to expand its discussion in the preamble on the importance of oil spill prevention.

Clarification of Terms for Geographic Areas

We suggest that the Coast Guard clarify the terms "inland" and "nearshore" in the preamble to the proposed rule. "Inland" has been defined at 46 CFR 7 as the area shoreward of the boundary lines except in the Gulf of Mexico. However, in the NCP "inland zone" delineates an area of federal responsibility for response action. In 40 CFR §300.5, the NCP defines the inland zone as the environment inland of the coastal zone excluding the Great Lakes and specified ports and harbors on inland rivers.

"Nearshore" in the proposed rule is the area extending seaward 12 n. miles from the boundary lines, except in the Gulf of Mexico. While dispersant application may be desirable for oil spills in areas that are farthest from the shore, it may be inappropriate for spills that are close to the shoreline.

Regulatory Alternatives

For the reasons discussed above, we do not support the Coast Guard's preferred alternative, Alternative 5, in its present form. We cannot support Alternative 1, because it would maintain the existing credit provisions for dispersant capability. Nor can we support Alternatives 3 and 4, which contain a credit for *in situ* burning that may compromise our ability to effectively respond to spills in certain areas.

Because of our concerns about the limited response resources in certain areas, we tentatively support Alternative 2 that would increase mechanical recovery resources but emphasize that our selection of this alternative may change after review of the PEIS. We strongly urge the Coast Guard to consider our concerns and to develop an alternative that reflects the recommendations described above.

We recognize that no alternative should be chosen until the PEIS is complete and all stakeholders, including EPA and the Federal and State Natural Resource Trustees, have had the opportunity to review it. We support the Coast Guard's conducting the PEIS and recommend that the comment period remain open until such time as the PEIS has been completed and reviewed.

Sincerely,

Michael B. Cook

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Office of Emergency and Remedial Response